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AMENDMENTS TO THE CLAIMS

1-24. (Cancelled).

25. (Previously Presented) Saccharomyces cerevisiae strains selected from the group consisting of H1791 (VTT C-98298, DSM 12213), H1795 (VTT C-98300, DSM 12214), H1803 (VTT C-98302, DSM 12215), H2193 (VTT C-99317, DSM 12722), H2195 (VTT C-99320, DSM 12723) and H2222 (VTT C-99322, DSM 12724).

26. (Previously Presented) *Schizosaccharomyces pombe* strains selected from the group consisting of H2369 (VTT C-99323, DSM 12725) and H2370 (VTT C-99324, DSM 12726).

43 does not from on xylose unless it has XR + XDH

- 43. (Currently Amended) A method for increasing yield of ethanol a product produced during a microbial production process comprising the steps of:
- (a) transforming a host microorganism selected from the group consisting of <u>Saccharomyces spp.</u> and <u>Schizosaccharomyces spp.</u> yeast and <u>Corynebacteria</u> with one or more polynucleotides encoding an enzyme to produce a transformed microorganism, wherein said enzyme is selected from the group consisting of <u>NAD-dependent</u> glutamate dehydrogenase, and malic enzyme, aldehyde dehydrogenase, malate dehydrogenase, glycerol-3-phosphate

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dehydrogenase, xylose-1-dehydrogenase, glyceraldehyde-3-phosphate dehydrogenase, orotate

reductase, and ferredoxin reductase, and

(b) culturing the transformed microorganism to produce ethanol a product selected from

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the group consisting of ethanol, xylitol, lysine, alanine, cysteine, aspartate, asparagine, glycine,

isoleucine, leucine, methionine, proline, arginine, scrine, threonine, valine, tryptophan and

polyhydroxybutyrate,

thereby increasing the yield of ethanol said product when compared to the yield of

ethanol said product when produced in a microorganism that has not been transformed according

to step (a).

44. (Cancelled).

45. (Currently Amended) The method of claim 43, wherein ethanol the product is

produced in an amount that is at least 5 % higher than the amount produced in a microorganism

that has not been transformed according to step (a).

46. (Currently Amended) The method of claim 43, wherein the ethanol product is

produced from carbohydrate.

47-68. (Cancelled).

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69. (New) The method of claim 46, wherein said carbohydrate is at least one selected

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from the group consisting of glucose and xylose.

70. (New) The method of claim 43, wherein the host microorganism is Saccharomyces

cerevisiae.

71. (New) The method of claim 43, wherein the host microorganism is

Schizosaccharomyces pombe.

72. (New) The method of claim 43, wherein the host microorganism is a yeast strain

carrying the genes for xylose reductase and xylitol dehydrogenase enzymes.

73. (New) The method of claim 72, wherein the host microorganism is a yeast strain

carrying, in addition, the gene for xylulose kinase.